

21
cont.

The invention also relates to a liquid toner containing 30% by weight to 50% by weight of a mixture containing 0.5% by weight to 1.5% by weight of carbon black, 0.5% by weight to 1.5% by weight of a charge control agent and 85% by weight to 95% by weight of a binder resin, and 50% by weight to 70% by weight of a carrier liquid. --

Please amend the last paragraph at page 12 through the first full paragraph at page 13 as follows:

22

- At least two methods are available for introducing the carboxyl groups into the resin. One is a method of oxidizing an alkyl group, such as methyl, at the end of the resin by the fusing air oxidation method to convert it into a carboxyl group. With this method, however, the polyolefin resin of a cyclic structure that has been synthesized using a metallocene catalyst has few branches, making it difficult to introduce many carboxyl groups into this resin. The other method is to add a peroxide to the resin, and react maleic anhydride or other ester and ester derivatives, amides and other polar unsaturated compounds with the resulting radical portion. With this method, it is theoretically possible to introduce many carboxyl groups onto the resin, but an increased proportion of introduction results in yellowing of the resin, making its transparency poor. If the use of the product is restricted to a toner, therefore, it is preferred to introduce 1 to 15% by weight, based on the resin, of maleic anhydride. The same improvement can be achieved by introducing hydroxyl groups or amino groups by a known method.

To improve the Fixing-ability of the toner, a cross linked structure may be introduced into the polyolefin resin having a cyclic structure. One of the methods for introducing this crosslinked structure is to add a diene monomer, such as norbornadiene or cyclohexadiene, together with the acyclic olefin and the cycloolefin, followed by reacting the system, thereby obtaining a terpolymeric polyolefin having a cyclic structure.